

REMARKS

In accordance with the foregoing, claims 1-20 are pending and under consideration. No new matter is presented in this Response.

REJECTIONS UNDER 35 U.S.C. §101:

Claims 1-11 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. At page 2 of the Office Action, the Examiner alleges that: "the amended features in claims 1-11 do not overcome rejections under 35 U.S.C. §101 for two reasons: (1) it does not recite the information storage medium to be computer-readable; and (2) it contains only data (version information and revision information). Data, contrary to a set of computer-executable instructions, do not impart functionality to a computer or computing device." Responses to these two reasons for rejecting claims 1-16 under 35 U.S.C. §101 are provided below in turn.

(1) Claims 1-11 Are Directed Towards "An Information Storage Medium For Use With A Recording And/Or Reproducing Apparatus" Which Is Statutory Subject Matter Under 35 U.S.C. §101

In response to reason (1), which alleges that claims 1-11 are directed to non-statutory subject matter because claims 1-11 do not recite the information storage medium to be computer-readable, the term "information storage medium" is not only an acceptable term for claim language in compliance with 35 U.S.C. 101, but is also a widespread term. For example, a "quick search" of all recently issued patents which were issued within approximately the past 3 months, and which have the term "information storage medium" recited in the claims, yielded over 50 issued patents. Such patents included, for example, U.S. Pat. No. 7,283,454 (claiming "an information storage medium comprising: an area including a recordable zone...a user data area..."), U.S. Pat. No. 7,286,454 (claiming "an information storage medium having a lead-in area, a user data area and a lead-out area, the information storage medium comprising: an information storage layer comprising an optimal power control area for obtaining an optimal recording condition..."), U.S. Pat. No. 7,301,878 (claiming "an information storage medium having a spirally or coaxially formed track or tracks on which given areas are sequentially arranged..."), and U.S. Pat. No. 7,313,319 (claiming "an information storage medium for reading by a computer device and having recorded video data including a plurality of unit compressed

video data portions correlated with successive periods on a time axis...").

These issued patents indicate that the term "information storage medium" is an acceptable term in claim terminology. As shown by the search results above, the U.S.P.T.O. routinely issues patents claiming "an information storage medium." Thus, the Examiner's automatic rejection of claims 1-11 under 35 U.S.C. §101 because claims 1-11 do not recite the information storage medium to be "computer-readable" is improper.

Furthermore, neither the MPEP nor the courts have implemented a *per se* rule barring claim language reciting "an information storage medium," and in fact, many claims which do not recite a "computer-readable medium" have been upheld as statutory subject matter in compliance with 35 U.S.C. §101. For example, claim 1 of *In re Lowry*, 32 F.3d at 1581; 32 USPQ2d at 1033, is drawn to a "memory for storing data for access by an application program being executed on a data processing system." Claim 1 does not recite the word "computer," the phrase "computer-readable," or the phrase "computer-readable medium." Furthermore, the memory recited in claim 1 could theoretically be embodied as a human memory, and yet the Federal Circuit still upheld claim 1 as statutory subject matter under 35 U.S.C. §101. As such, the Federal Circuit's holding of patentability under 35 U.S.C. §101 is not related to the word "computer" or the phrase "computer readable medium." Similarly, in this case, the Examiner should not reject claims 1-11 simply because claims 1-11 do not recite the phrase "a computer-readable medium." There is no legal basis to reject claims 1-11 under 35 U.S.C. §101 simply because claims 1-11 do not recite the phrase "computer-readable medium."

Thus, it is respectfully submitted that the Examiner's rejections of claims 1-11 under 35 U.S.C. §101 for not reciting a "computer-readable medium" should be withdrawn.

(2) Claims 1-11 Impart Functionality To The Recording and/or Reproducing Device

In response to reason (2), which alleges that claims 1-11 are directed to non-statutory subject matter because claims 1-11 contain "only data (version information and revision information)," the applicants respectfully disagree. Claims 1-11 impart functionality to the recording and/or reproducing device, and therefore are directed to statutory subject matter.

Claim 1 recites:

"...a reproduction-only area to store standard version information indicating at least one factor associated with data recording and/or reproduction prescribed by a manufacturer, and revision information different from the standard version

information indicating an update to the at least one factor and also prescribed by the manufacturer,

wherein the standard version information and the revision information are used by the recording and/or reproducing apparatus to record and/or reproduce data to and/or from the information storage medium (emphasis added)."

The standard version information performs the function of indicating "at least one factor associated with data recording and/or reproduction," the revision number performs the function of indicating "an update to the at least one factor," and both the standard version number and the revision number are functionally interrelated to the recording and/or reproducing apparatus because the recording and/or reproducing apparatus uses the standard version number and the revision information to record and/or reproduce data to and/or from the information storage medium. The clear language of claim 1 recites functional descriptive material, and is statutory subject matter for that reason. MPEP 2106.01.

In the rejection of claim 1, the Examiner relies on Annex IV of The Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, published in the Official Gazette on November 22, 2005, to support the Examiner's argument that claims 1-11 do not comply with 35 U.S.C. §101. The section of Annex IV quoted by the Examiner states: "certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter." Thus, for example, a claim which simply recites music is not statutory subject matter.

However, the same section of Annex IV relied upon by the Examiner states the following:

"The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implement a statutory process (emphasis added)." MPEP 2106.01 (II) (quoting Annex IV of The Interim Guidelines).

By way of analogy to this above-quoted passage, it is respectfully submitted that claim 1 is directed towards statutory subject matter. The information storage medium recited by claim 1 is much more similar to the example of statutory subject matter provided by Annex IV than the example of nonstatutory subject matter provided by Annex IV. Claim 1 does not simply recite

"data," e.g., "music." Instead, claim 1 recites an "information storage medium comprising: a reproduction-only area to store standard version information indicating at least one factor associated with data recording and/or reproduction prescribed by a manufacturer, and revision information different from the standard version information indicating an update to the at least one factor and also prescribed by the manufacturer, wherein the standard version information and the revision information are used by the recording and/or reproducing apparatus to record and/or reproduce data to and/or from the information storage medium." Like the particular grouping of musical notes which cause another defined series of notes to be played, the standard version number and revision number recited by claim 1 are used by the recording and/or reproducing apparatus to record and/or reproduce data to and/or from the information storage medium. The standard version number and revision number recited by claim 1 are not "data per se," because claim 1 does not simply recite the standard version number and revision number. Rather, claim 1 recites functional descriptive material recorded on an information storage medium which performs a real-world function. Thus, it is respectfully submitted that Annex IV, upon which the Examiner relies on in rejecting claim 1, actually supports the argument that claims 1-11 are directed towards statutory subject matter.

Thus, it is respectfully submitted that the rejections of claims 1-11 under 35 U.S.C. §101 should be withdrawn for at least these reasons.

REJECTIONS UNDER 35 U.S.C. §102:

Claims 1-5, 7-8, 10-16, 18 and 20 are rejected under 35 U.S.C. §102(b) as being anticipated by Maeda et al. (U.S. Patent 6,072,759) (hereinafter, "Maeda").

At page 2 of the Office Action in the Response to Arguments section, the Examiner states: "Applicant's arguments filed 11/23/2007 have been fully considered but they are not persuasive...the cited paragraphs in Maeda disclose various pieces of information that can be interpreted as either version information or revision information depending on various situations. For example, the 'version number' in column 9, lines 27-30 could be 'version information' recited in claim 1. In that case, the 'revision number' recited in claim 1 could correspond to the information used to note the minimum lead-out rate cited in Maeda, column 9, lines 35-39. Obviously, discs having the same 'version number' with different minimum lead-out rates should have different values recorded to note these changes correspondingly. Consequently, it is safe to say that this information indicates an update to the 'at least one factor,' which can be

represented by the 'version number.' This information is recorded to note a specific value of minimum rate that could be changed, thus reflecting an update because whenever the information is changed, it is recorded."

In response, the applicants respectfully disagree.

Using the Examiner's example, changing the information about the minimum rate does not update at least one factor associated with the version number, because the only factor associated with the version number is the version number. The Examiner's own example states that the discs have the same version number, regardless of the changes to the minimum lead-out rates. Changing the minimum lead-out rates does not change the version number in the discs, and does not update any factors associated with the version numbers.

To the extent that the Examiner is arguing that Maeda discloses that the version number (col. 9, lines 27-30) is associated with a factor that is updated according to the recorded minimum lead-out rate (col. 9, lines 35-39), it is respectfully submitted that Maeda does not disclose any such associations. Maeda does not disclose that the version number is associated with any factors which are updated according to the minimum lead-out rate or according to any other types of physical format information. The Examiner has not pointed to any portion of Maeda supporting the argument that changing the "minimum lead-out rate" will update at least one factor associated with the version number, and it is submitted that Maeda does not make such a disclosure.

In response to the Examiner's example, the applicant now submits another example to illustrate the differences between Maeda and the invention recited by claim 1. Take, for example, a disc 1 which has a version number of 1.0 and a minimum lead-out rate of 2.52 Mbps. According to Maeda, the version number of this disc 1 is "associated" with one factor: the version number v1.0. If the minimum lead-out rate of disc 1 changes from 5.04 Mbps to, say, 10.08 Mbps, Maeda does not disclose that recording the changed minimum lead-out rate will "update" any factors associated with the version number. The changed minimum lead-out rate does not "update" the "at least one factor" of the unrelated version number in any way. Maeda does not teach, suggest, or otherwise imply that any of the nine physical format factors (book type, version number, disk size, minimum lead-out rate, number of layers, track path, layer type, linear density, and track density) listed in col. 9, 13-55 update any factors associated with any of the other physical format factors.

In contrast, continuing with the above-described example, take a disc 2 which has

"version information" of 1.0 associated with "at least one factor" and "revision information different from the standard version information indicating an update to the at least one factor," as recited by claim 1. As an example, the "at least one factor" refers to a recording speed of 1x to 4x prescribed by the manufacturer, which is the default recording speed range of disc 2.

According to aspects of the present invention, this revision information indicates an update to the recording speed. For example, revision information of 1.0 indicates that the disc 2 has an updated recording speed of 1x to 5x instead of 1x to 4x, and revision information of 2.0 indicates that the disc 2 has an updated recording speed of 1x to 6x instead of 1x to 4x (see specification, paragraphs [0027]-[0028]). Thus, unlike the physical format information disclosed by Maeda, the revision information recited by claim 1 updates "at least one factor" which is associated with another type of information, i.e., recording speed associated with the standard version information.

Thus, it is respectfully submitted that the rejection of claim 1 should be withdrawn for these reasons.

Claims 2-5, 7-8, and 10-11 depend on claim 1. Accordingly, it is respectfully submitted that the rejections of claims 2-5, 7-8, and 10-11 should be withdrawn for substantially the same reasons that the rejection of claim 1 should be withdrawn.

Claim 12

Claim 12 recites the operations of: "recording standard version information indicating at least one factor associated with data recording and/or reproduction prescribed by a manufacturer in a reproduction-only area of at least one of the lead-in and lead-out areas" and "recording revision information distinguished from the standard version information indicating an update to the at least one factor and also prescribed by the manufacturer in the reproduction-only area." As explained above with reference to claim 1, Maeda does not anticipate these recited features of claim 12. Maeda does not disclose that the version number is associated with any factors which are updated according to the minimum lead-out rate or according to any other types of physical format information.

Accordingly, it is respectfully submitted that the rejection of claim 12 should be withdrawn for at least these reasons.

Claims 13-16 and 18 depend on claim 12. Accordingly, it is respectfully submitted that the rejections of claims 13-16 and 18 should be withdrawn for substantially the same reasons that the rejection of claim 12 should be withdrawn.

Claim 20

Claim 20 recites the feature of: "a drive system for recording and/or reproducing data on an information storage medium comprising a reproduction-only area to record standard version information indicating at least one factor associated with data recording and/or reproduction prescribed by a manufacturer and revision information different from the standard version information indicating an update to the at least one factor and also prescribed by the manufacturer, comprising..." As explained above with reference to claim 1, Maeda does not anticipate these recited features of claim 20. Maeda does not disclose that the version number is associated with any factors which are updated according to the minimum lead-out rate or according to any other types of physical format information.

Accordingly, it is respectfully submitted that the rejection of claim 20 should be withdrawn for at least these reasons.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 6 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Maeda et al. (U.S. Patent 6,072,759) as applied to claims 1-5, 7-8, 10-16, 18 and 20 above, and further in view of Ohno et al. (U.S. Patent 6,628,602).

Claim 6 depends on claim 1, and claim 17 depends on claim 12. Accordingly, it is respectfully submitted that the rejections of claims 6 and 17 should be withdrawn for substantially the same reasons that the rejections of claims 1 and 12 should be withdrawn, respectively.

Claims 9 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Maeda et al. (U.S. Patent 6,072,759) as applied to claims 1-5, 7-8, 10-16, 18 and 20 above, and further in view of Kondo (U.S. Patent 6,600,716).

Claim 9 depends on claim 1, and claim 19 depends on claim 12. Accordingly, it is respectfully submitted that the rejections of claims 9 and 19 should be withdrawn for substantially the same reasons that the rejections of claims 1 and 12 should be withdrawn, respectively.

Based on the foregoing, this rejection is respectfully requested to be withdrawn.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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